AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (Original) An inositol derivative of formula (I):

(I)

wherein

R^1 is   , where n is an integer in the range of 1 to 12;

R^2 and R^3 are each independently H, alkyl, arylalkyl, cycloalkyl, heteroalkyl,

$-(CH_2)_m NHR'$, $-(CH_2)_l CO_2 R''$, $-COR'''$ or $-SO_2 R''''$, where R', R'', R''' and R'''' are each alkyl, m

is an integer in the range of 2 to 5, and l is an integer in the range of 1 to 5;

p is an integer in the range of 0 to 2; and

X and X' are each independently $-O-CO-O-$, $-O-CO-NH-(CH_2)_m-O-$, $-O-CO-(CH_2)_l-O-$ or

$-O-(CH_2)_l-CO-NH-(CH_2)_m-O-$, where m and l are the same as defined above.
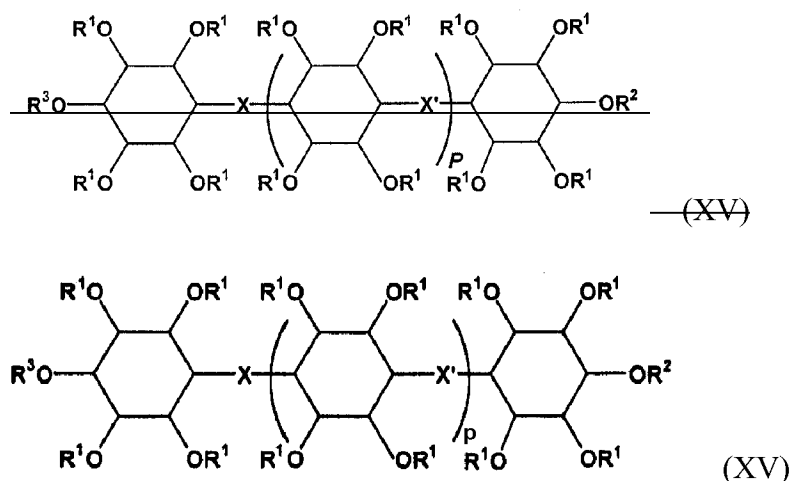
2

2.   (currently amended): The inositol derivative of claim 1, which is represented by
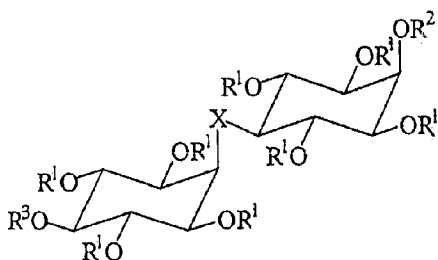
formula (XV):

—(XV)

(XV)

wherein R^1, R^2, R^3, X, X' and p are the same as defined in claim 1.
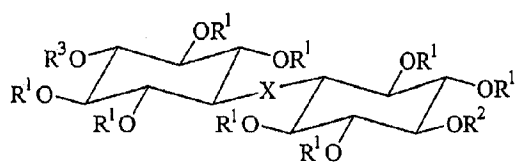
3.   (Original) The inositol derivative of claim 1, wherein p is 0 or 1.

4.   (Original) The inositol derivative of claim 1, wherein n is an integer in the range

of 3 to 8.

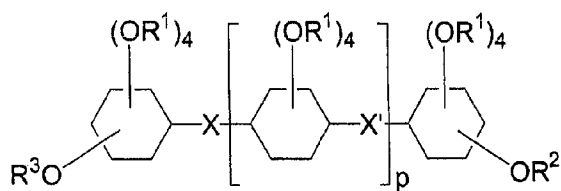5.   (Original) The inositol derivative of claim 1, which is represented by formula (II),

(III) or (IV):

3
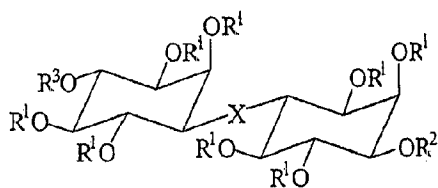
(II)

(III)

(IV)

wherein R^1, R^2, R^3 and X are the same as defined in claim 1.

6.   (currently amended) A method for preparing inositol derivatives of formula (I):
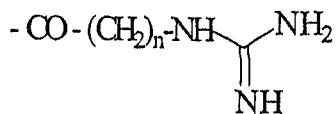

(I), comprising the steps of:

(a) obtaining intermediates by protecting the hydroxyl groups of *myo*- or *scyllo*-inositol;

4

(b) coupling two or more of the intermediates obtained in step (a) to produce X and/or X'

couplings, followed by removal of the protecting groups;

(c) introducing one or more amino acids corresponding to R^1 ~~group~~groups to the inositol

polymer obtained in step (b) by acylation; and

(d) introducing guanidinium groups to the amino acid (R^1) N-~~terminal~~termini of the

inositol polymer so that the amino acids are guanidinylated at the amino groups,

wherein

R^1 is

$$-CO-(CH_2)_n-NH-\underset{\underset{NH}{\|}}{C}-NH_2$$

, where n is an integer in the range of 1 to 12;

R^2 and R^3 are each independently H, alkyl, arylalkyl, cycloalkyl, heteroalkyl,

$-(CH_2)_mNHR'$, $-(CH_2)_lCO_2R''$, $-COR'''$ or $-SO_2R''''$, where R', R'', R''' and R'''' are each alkyl, m

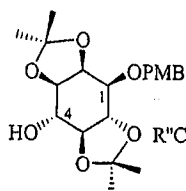is an integer in the range of 2 to 5, and l is an integer in the range of 1 to 5;

X and X' are each independently $-O-CO-O-$, $-O-CO-NH-(CH_2)_m-O-$, $-O-CO-(CH_2)_l-O-$,

or $-O-(CH_2)_l-CO-NH-(CH_2)_m-O-$, where m and l are the same as defined above; and
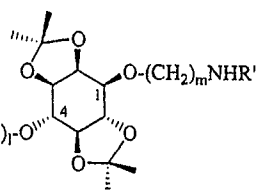
p is an integer in the range of 0 to 2.

7.   (previously presented): The method of claim 6, wherein the intermediate obtained

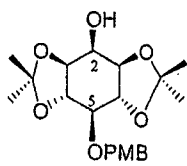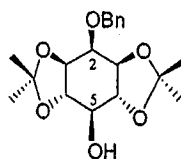in step (a) is selected from the compounds represented by formulae (V) to (XIII):
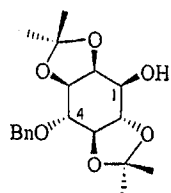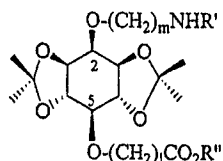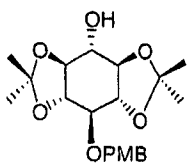
(V)   (VI)   (VII)

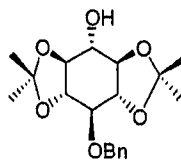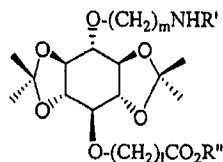(VIII)   (IX)   (X)

(XI)   (XII)   (XIII)

wherein,
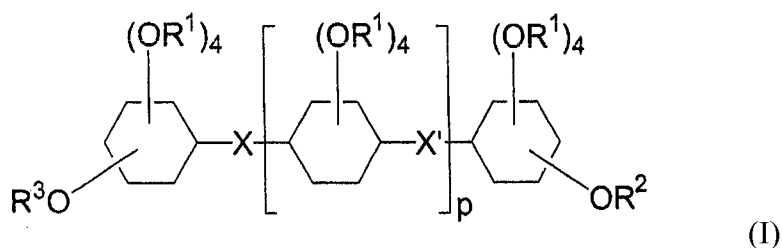
R' and R" are each alkyl,

l is an integer in the range of 1 to 5,
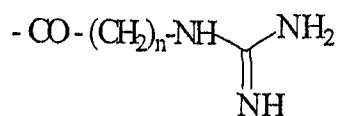
m is an integer in the range of 2 to 5,

Bn is benzyl, and

PMB is *p*-methoxybenzyl.

6

8.   (currently amended) A composition for delivering a drug or a diagnostic reagent

across a biological membrane into a cell, comprising <u>the drug or diagnostic reagent and</u> an

inositol derivative of formula (I) ~~and the drug or diagnostic reagent~~:

(I)

wherein

R^1 is

, where n is an integer in the range of 1 to 12;

R^2 and R^3 are each independently H, alkyl, arylalkyl, cycloalkyl, heteroalkyl, $-(CH_2)_mNHR'$,

$-(CH_2)_lCO_2R''$, $-COR'''$ or $-SO_2R''''$, where R', R'', R''' and R'''' are each alkyl, m is an integer in

the range of 2 to 5, and l is an integer in the range of 1 to 5;

X and X' are each independently $-O-CO-O-$, $-O-CO-NH-(CH_2)_m-O-$, $-O-CO-(CH_2)_l-O-$ or,

$-O-(CH_2)_l-CO-NH-(CH_2)_m-O-$, where m and l are the same as defined above; and

p is an integer in the range of 0 to 2.

9.   (Original) The composition of claim 8, wherein the drug or the diagnostic reagent

is an organic compound having a molecular weight ranging from 100 to 1500 g/mol.

10.   (Original) The composition of claim 8, wherein the drug or the diagnostic reagent

is a polymer compound selected from a peptide and a nucleic acid.

11.   (Original) The composition of claim 8, wherein the inositol derivative of formula

(I) forms a conjugate through a covalent bond with the drug or the diagnostic reagent.

12.   (Original) The composition of claim 8, wherein the inositol derivative of formula

(I) forms an ionic complex through ionic bonds with the drug or the diagnostic reagent.

13.   (Cancelled)